

Issuance Date: March 31, 2004  
Effective Date: April 1, 2004  
Expiration Date: March 31, 2009

STATE WASTE DISCHARGE PERMIT NUMBER NO. ST6035

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
Southwest Regional Office

In compliance with the provisions of the  
State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington, as amended,  
authorizes

**City of Tacoma, Dept of Public Utilities, Light Division**  
**(Alder Lake Park)**  
**3628 South 35th**  
**Tacoma, WA 98408**

to discharge wastewater in accordance with the special and general conditions which follow.

Plant Location: Alder Lake Park  
50324 School Road  
Eatonville, WA

Discharge Location:  
Latitude: 46° 48' 13" N  
Longitude: 122° 17' 52" W

Treatment Type: Equalization Pond with  
Terraced Wetland Treatment

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TABLE OF CONTENTS

	<u>Page</u>
SUMMARY OF PERMIT REPORT SUBMITTALS .....	4
<b>SPECIAL CONDITIONS</b>	
S1. DISCHARGE LIMITATIONS .....	5
A. Effluent Limits	
B. Ground Water Limitations	
S2. MONITORING REQUIREMENTS .....	5
A. Wastewater Monitoring	
B. Flow Measurement	
C. Laboratory Accreditation	
D. Sampling and Analytical Procedures	
S3. REPORTING AND RECORDKEEPING REQUIREMENTS .....	7
A. Reporting	
B. Records Retention	
C. Recording of Results	
D. Additional Monitoring by the Permittee	
E. Noncompliance Notification	
S4. FACILITY LOADING .....	8
S5. OPERATION AND MAINTENANCE .....	9
A. Certified Operator	
B. O & M Program	
C. Short-term Reduction	
D. Electrical Power Failure	
E. Prevent Connection of Inflow	
F. Bypass Procedures	
G. Operations and Maintenance (O&M) Manual	
S6. RESIDUAL SOLIDS .....	12

TABLE OF CONTENTS (cont.)

Page

**GENERAL CONDITIONS**

G1. SIGNATORY REQUIREMENTS..... 13

G2. RIGHT OF ENTRY ..... 13

G3. PERMIT ACTIONS..... 14

G4. REPORTING A CAUSE FOR MODIFICATION ..... 14

G5. NOTIFICATION OF NEW OR ALTERED SOURCES..... 14

G6. PLAN REVIEW REQUIRED..... 14

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES ..... 14

G8. DUTY TO REAPPLY ..... 14

G9. PAYMENT OF FEES..... 15

G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS..... 15

### SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions sections of this permit for unscheduled submittal requirements.

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
S3.A.	Discharge Monitoring Report	Monthly	Continued from last Permit
S4.C.	Wasteload Assessment	Annually	March 15, 2005
G8.	Application for permit renewal	1/permit cycle	November 1, 2008

## SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

#### A. Effluent Limits

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated and disinfected wastewater to forest land at the permitted location subject to the following limitations:

	EFFLUENT LIMITATIONS
Parameter	Average Monthly <sup>a</sup>
pH	Shall not be outside a range of 6.0 - 9.0
BOD <sub>5</sub>	30 mg/L
TSS	30 mg/L
Total Coliform	230 #/100ml
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.	

#### B. Ground Water Limitations

The Department has promulgated Ground Water Quality Standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100). Ground water criteria contained in WAC 173-200-040 shall not be violated.

### S2. MONITORING REQUIREMENTS

#### A. Wastewater Monitoring

The sampling point for the influent will be at the septic tanks.

The sampling point for the effluent from the above ground treatment works will be at the end of pipe prior to discharging into the sprayfields.

The Permittee shall monitor the wastewater according to the following schedule:

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Flow	MGD	Influent	Continuous	Estimated Pump Hours
BOD	mg/L	Influent Effluent	1/month	Composite
TSS	mg/L	Influent Effluent	1/month	Composite
pH	Standard Units	Influent Effluent	1/month	Grab
Chlorine Residual	mg/L	Effluent	1/day	Grab
Total Coliform	#/100 ml	Effluent	1/month	Grab
Total Nitrogen**	mg/L	Effluent	1/month	Grab
Total Dissolved Solids	mg/L	Effluent	1/month	Grab

\*\*Total Nitrogen includes nitrate, nitrite, and total kjeldahl nitrogen.

B. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

C. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Crops, soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

D. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology, 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology.

### **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

#### **A. Reporting**

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the reporting period. The report(s) shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Washington 98504-7775.

#### **B. Records Retention**

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

The Permittee shall retain all records pertaining to the monitoring of sludge for a minimum of five years.

#### **C. Recording of Results**

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

#### **D. Additional Monitoring by the Permittee**

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
3. Immediately notify the Department of the failure to comply; and
4. Submit a detailed written report to the Department within thirty days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

**S4. FACILITY LOADING**

Design Criteria

- A. The following design criterion for the permitted treatment facility shall not be exceeded:

Monthly average influent flow (max. month): 22,000 gpd

Monthly average dry weather flow: 22,000 gpd

Monthly average wet weather flow: 1,500 gpd

- B. Plans for Maintaining Adequate Capacity

When the actual flow or wasteload reaches 85 percent of any one of the design criteria in S4.A for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee shall submit to the Department, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet this objective.

1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
3. Limitation on future sewer extensions or connections or additional wasteloads.



4. Modification or expansion of facilities necessary to accommodate increased flow or wasteload.
5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or wasteload.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Wasteload Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by March 15, 2005, and annually thereafter. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows; BOD and total nitrogen loadings in lbs./acre/year; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

**S5. OPERATION AND MAINTENANCE**

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

A. Certified Operator

An operator certified for at least a Class 2 plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class 2 plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such

reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires primary sedimentation and disinfection.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

The Permittee shall immediately notify the Department of any spill, overflow, or bypass from any portion of the collection or treatment system.

The bypass of wastes from any portion of the collection or treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

1. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."

2. Anticipated Bypass That Has The Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall apply to the Department for the administrative order at least 30 days before the planned date of bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department will consider the following prior to issuing an administrative order:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

3. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

G. Operations and Maintenance (O&M) Manual

The O&M Manual shall be reviewed by the Permittee at least annually. The Permittee shall confirm the review by letter and/or a manual update to the Department. All manual changes or updates shall be submitted to the Department whenever they are incorporated into the manual. The approved operation and maintenance manual shall be kept available at the treatment plant.

H. Irrigation Land Application

1. There shall be no runoff of wastewater applied to land by spray irrigation to any surface waters of the state or to any land not owned by or under control of the Permittee.
2. The Permittee shall use recognized good practices, and all available and reasonable procedures to control odors from the land application system. When notified by the Department, the Permittee shall implement measures to reduce odors to a reasonable minimum.
3. The wastewater shall not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Cause long-term anaerobic conditions in the soil.
  - c. Cause ponding of wastewater and produce objectionable odors or support insects or vectors.
  - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

1. The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation. The Permittee shall immediately inform the Department in writing of any proposed changes to existing agreements.

**S6. RESIDUAL SOLIDS**

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters

## **GENERAL CONDITIONS**

### **G1. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **G2. RIGHT OF ENTRY**

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

**G3. PERMIT ACTIONS**

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

**G4. REPORTING A CAUSE FOR MODIFICATION**

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

**G5. NOTIFICATION OF NEW OR ALTERED SOURCES**

The Permittee shall submit written notice to the Department whenever any new discharge or increase in volume or change in character of an existing discharge into the sewer is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the collection or treatment system; (2) would increase the total system flow or influent waste loading by more than 10 percent; (3) is not part of an approved general sewer plan or approved plans and specifications; or would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the system's ability to adequately transport and treat the added flow and/or wasteload.

**G6. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

**G7. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G8. DUTY TO REAPPLY**

The Permittee must apply for permit renewal by November 1, 2008.

**G9. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

**G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.